

## Adult Vaccination Schedule

Many vaccines are recommended for adults. Some of these vaccines, such as tetanus and diphtheria toxoids and influenza vaccine, are recommended for many or all adults. Some vaccines are recommended only for adults with certain underlying medical conditions, or those whose occupation or lifestyle place them at increased risk for exposure. Examples of these vaccines are pneumococcal polysaccharide, hepatitis B, and MMR. Adults who travel outside the United States may need specific vaccines such as typhoid and yellow fever.

Until recently, keeping current on vaccine recommendations for adults could be a challenge. The Advisory Committee on Immunization Practices did not publish an adult vaccination schedule, and the routine childhood schedule only included persons through 18 years of age.

In October 2002, keeping up to date with adult immunization recommendations became a lot easier with the publication of an adult immunization schedule.

Recommended childhood immunization schedules have been available to clinicians for many years. Since 1995, the childhood schedule has been revised annually. However, a comprehensive vaccination schedule for ADULTS was not available. In October 2002, the Advisory Committee on Immunization Practices, also called the ACIP published for the first time a comprehensive schedule for the routine vaccination of adults. The Recommended Adult Immunization Schedule is based on published recommendations of the American Academy of Family Physicians, and the American Academy of Obstetrics and Gynecology.

The schedule contains information about the vaccines recommended for routine use among adults. It does not contain information on vaccines for international travel. Since it's release in 2002, we received comments and suggestions on the content and formatting of the schedule. ACIP has revised the adult immunization schedule for 2003-2004, and many of the comments we received have been incorporated.

The adult immunization schedule is actually two schedules. One schedule lists vaccines recommended by age group. The second schedule lists vaccines indicated by underlying medical condition. The schedule by age presents a summary of vaccine recommendations in a format similar to the childhood and adolescent schedule. Vaccines are listed in horizontal rows, and three age groups are indicated in columns.

Vaccine indications are color coded. Those shown in orange are recommended for everyone in the indicated age group. Vaccines recommended if the person has a specific medical or exposure indication are coded in pink crosshatch.

Vaccines that should be administered to adults because there is no evidence that they were administered in childhood, are indicated in green crosshatch. Doses and frequency are noted on the bars for easy administration.

Footnotes in the back provide additional information for the vaccines listed on the schedule. These footnotes are summaries of the vaccine indications from the published recommendations. Each footnote includes references to the original ACIP recommendations. We strongly recommend that you familiarize yourself with the footnotes as well as the recommendations on the grids.

The second page of the schedule provides guidance for vaccination of adults with certain medical conditions, regardless of age. The conditions are listed in rows, and include pregnancy, chronic illnesses such as diabetes, heart and lung disease, immunodeficiency, renal failure, asplenia and HIV infection. The vaccines are listed in columns. Like the first page, vaccines are color coded to indicate which vaccines are indicated or contraindicated. Some boxes contain letters. These are special notes regarding the use of vaccines with certain medical conditions and are explained at the bottom of the page.

For instance, the note for hepatitis B vaccine for persons with renal failure and recipients of hemodialysis indicates that providers should use a special formulation of vaccine that contains a higher concentration of antigen and to monitor antibody titers to hepatitis B surface antigen each year.

The adult immunization schedule has been designed to allow clinicians to quickly determine the vaccines their patients may need, without having to reference multiple information sources, such as individual ACIP statements. Here are two examples.

You see a 33 year old male in your office for a routine medical assessment in October. The person has no underlying medical conditions. His last Td on record was 15 years ago. His chart indicates that he received 2 doses of MMR before he started college, had chickenpox as a child. He has no plans to travel outside the U.S. Since this person has no underlying medical conditions you use the schedule that lists vaccines by age. You see that he needs a Td booster today. You can ask a few questions in order to assess his risk for hepatitis A and B vaccines, and administer them if indicated or requested.

Later that day you see a 29 year old woman who is 5 months pregnant and has no chronic illnesses. She has no Td on record, and a prenatal serologic test included in her medical record indicates she is not immune to rubella. In this situation you use the second page of the Schedule which lists pregnancy and other medical conditions. Looking at the vaccines indicated for a pregnant woman, you can see the woman needs a Td booster, and influenza vaccine, since she will be in the third trimester of pregnancy during influenza season. Although she needs MMR vaccine, it is contraindicated during pregnancy. You

assess her risk of hepatitis A and B, and administer them if needed. This may be a good time to place a reminder in her chart to administer MMR and perhaps varicella vaccine, after the baby is born.

The revised adult immunization schedule for 2003- 2004 is now being finalized. Publication is anticipated the second week of October, 2003, to coincide with National Adult Immunization Awareness week. All clinicians who care for adults should have a copy of this schedule in the office and vaccinate adult patients on a routine basis. If you don't have a copy, you can get one from the National Immunization Program website.